Function vs Method in Python

❖ What is a function?
Definition:

A **function** is an independent block of code that performs a specific task. It is **not**

inside a class, and it **does not need an object t**o be used.

Example of a Function:

We created a function called say_hello. Its job is to print the sentence **"Hello**

Maryam".

When we called it using say_hello (), it run and printed the message.

Simple Explanation:

A function is like a tool that you can use anytime, anywhere in your code. You just

call its name, and it runs the instructions inside it.

It doesn't belong to any object or class – it's completely **independent.**

❖ What is a Method?
Definition:

A **method** is a function that is defined **inside a class**. It performs actions using the

data of the object it belongs to. A method **always takes self as the first parameter**

to refer to the current object.

Example of a Method:

We created a class called person. Inside it, we wrote a method called introduce that prints: **"Hello, my name is maryam and iam 20 years old."**

We then created an object called p1 from the class. When we called the method using p1. Introduce (), it worked and printed the massage.

Simple Explanation:

Unlike a regular function, a method lives inside a class. It cannot be used on its own – it must be called through an object. The self-parameter lets the method access the objects own data (like its name or age).

- ❖ **What is a class in Python?**

   In Python, class is like template used to create objects. It defines the structure and behavior that all objects of that type will have.

- ❖ **What is a self in Python?**

   In Python, self is a **special keyword** used inside class methods. It refers to the **current object** – the specific instance that is calling the method.